

## ! COVID-19: CDC Museum Closed to the Public

Due to ongoing concerns about the novel coronavirus (COVID-19), the David J. Sencer CDC Museum is closed to the public and will remain closed as we continue to assess and monitor developments. All CDC Museum tours are canceled until further notice.

This decision is being made out of an abundance of caution and based upon the guidance of the CDC regarding social distancing and the elimination of large gatherings.

Please continue to check our website and social media accounts for additional updates.



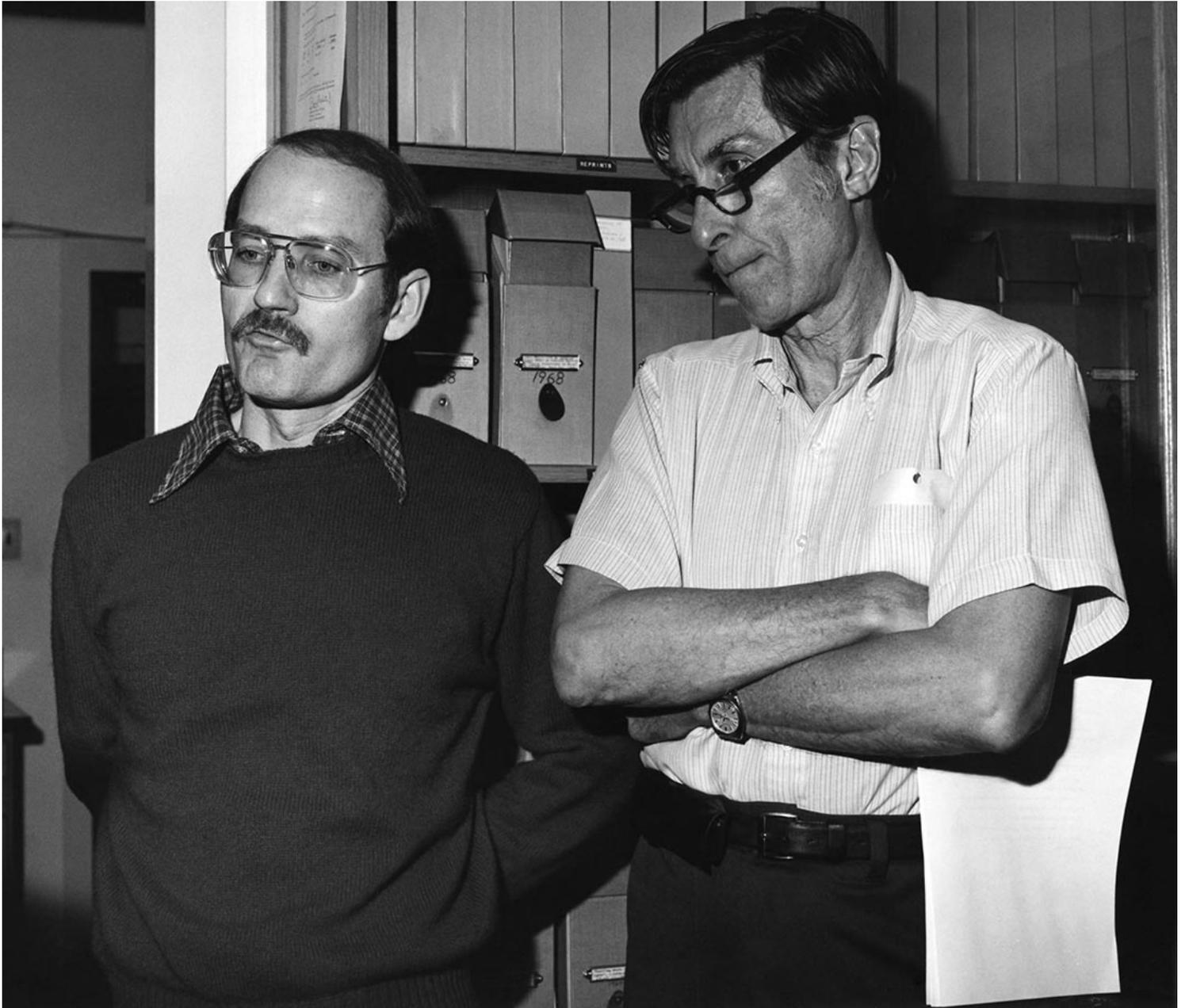
# Legionnaires' Disease



## “Mystery of the Killer Fever”

The first new infectious disease challenge came in 1976, when CDC received a report of an outbreak of a mystery illness in Pennsylvania. Within a few weeks, 221 people across Pennsylvania were sick, and 34 had died from a severe respiratory illness. Media coverage was unprecedented for the agency, as this was the first mystery disease in the U.S. in recent memory. Media-related objects displayed here note the mystery surrounding the new disease. An enlarged cover of *Newsweek* magazine warns of the “Mystery of the Killer Fever” and a *TIME* magazine shows a hand holding a vial with the title, “Disease Detectives Tracing the Philly Killer.” Both covers show the sense of panic people felt regarding the mysterious illness.

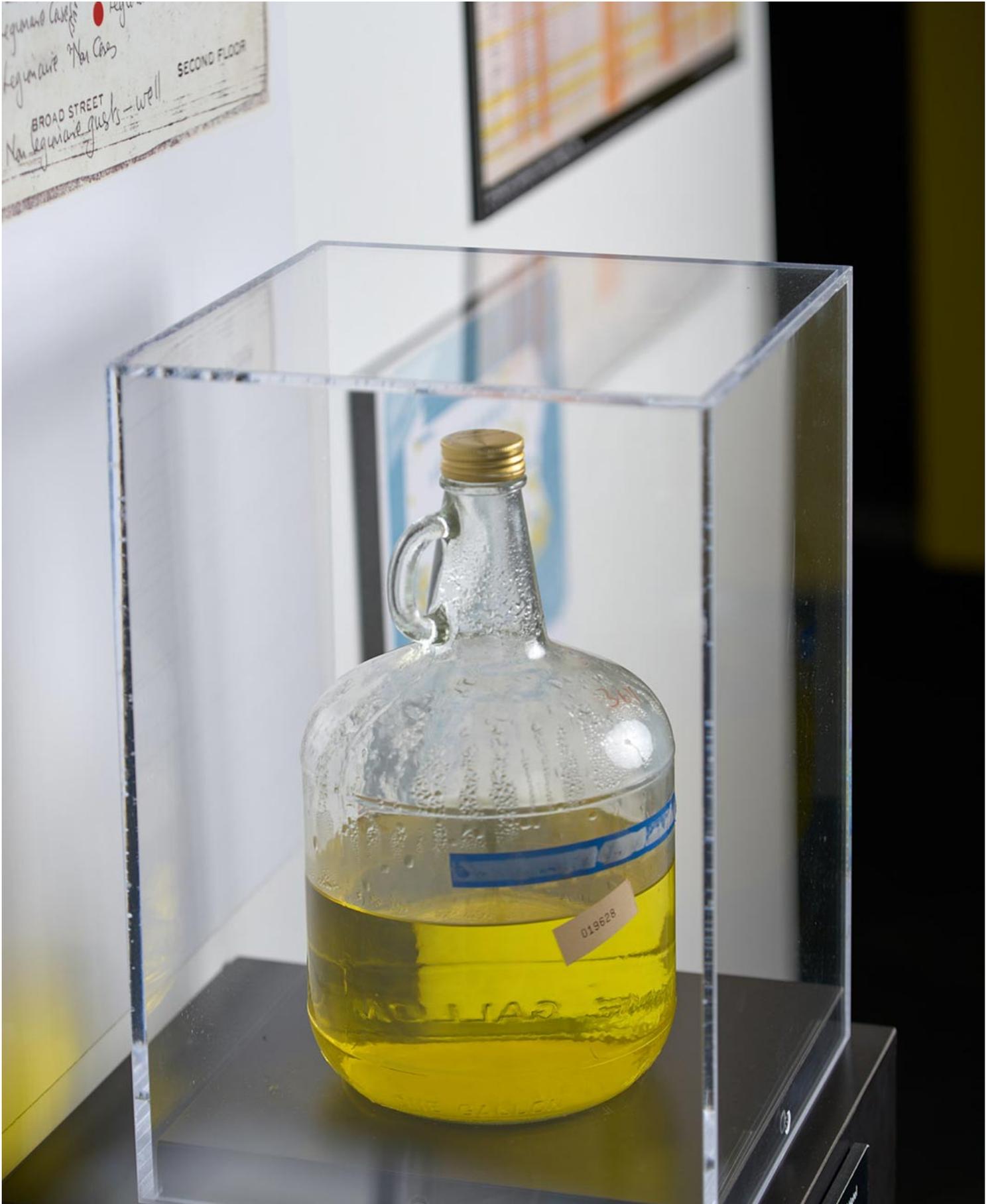
The Pennsylvania State Health Department requested assistance from CDC, so a team of [Epidemic Intelligence Service](#) Officers was sent in to investigate. The team determined that most people affected by the mystery illness had attended the American Legion convention at the Bellevue-Stratford hotel in Philadelphia, Pennsylvania. While this was helpful information, the team continued to collect data to determine the specific source of the outbreak. They tested objects like a hat and pin that belonged to a conference attendee and cigarettes that were given to participants in their conference materials. The team also asked conference attendees questions that could help determine a common exposure, such as where each person slept and where they ate. They used maps of Pennsylvania, like the one printed in *Newsweek* on display here, Philadelphia city maps, and a Sanborn Fire Insurance map of the Bellevue-Stratford hotel to compare location similarities and differences between sick and non-affected people. After spending weeks collecting and reviewing data, the team suspected the pathogen was airborne, but extensive lab tests yielded no results.



## Dr. McDade's Discovery

Months after the end of the investigation, a CDC microbiologist named [Dr. Joseph McDade](#), whose photograph is shown, revisited the lab cultures and was able to isolate a new bacterium. He named it *Legionella pneumophila*, after the Legionnaires' convention.







## “Chiller Water”

This newly identified pathogen was suspected of contaminating the Bellevue Stratford’s air conditioning system. The exhibit displays a large glass jug filled with chiller water taken from the Bellevue-Stratford Hotel’s cooling system during the outbreak investigation. Since 1976, air conditioning systems changed and agencies around the world have more stringent cleaning and hygiene standards for cooling towers and large-scale air-conditioning systems. The nationwide attention CDC received became the new norm for the agency, as the country began to see CDC as the leader in protecting the nation against potential new diseases.

### Enrichment Modules

SEE

#### Take a closer look:

- Learn more about [Legionnaires’ disease](#) and [Legionella bacteria](#). If you’re feeling particularly inspired, check out the full text of this [WHO guide to legionellosis prevention](#) [↗](#).
- For a more succinct explanation of Legionnaires’ Disease, check out this [CDC fact sheet](#) [📄](#).
- Take a look at historic photographs of CDC’s Legionnaires’ discovery: microbiologist [Martha Redus](#) conducts *Legionella pneumophila* lab tests, [Jim Feeley and George Gorman](#) examine culture plates, a [microbiologist](#) inspects samples in a microscope, and [CDC officials](#) speak at a Senate hearing.
- View *Legionella pneumophila* with a [scanning electron microscope](#) (SEM), [transmission electron microscope](#) (TEM), and computer-generated [3D image](#). If you dare, take a peek at a [lung tissue sample](#) from a patient who succumbed to a fatal case of legionellosis.
- View [magazine covers](#) featuring titles related to the outbreak of Legionnaires’ disease.
- Watch this [animation](#) and in-depth exploration of *Legionella pneumophila* and the disease it causes.
- Learn about the largest [outbreak of Legionnaires’ disease](#) [↗](#) in recent history and visualize how cases spread over time in Michigan.

## HEAR

### From the source:

- Legionnaires' disease cases and outbreaks are increasing in the U.S. To hear about initiatives and best practices to meet the challenge of Legionnaires' disease, watch this [Public Health Grand Rounds video](#).
- Explore the history, mystery, and discovery of Legionnaires' in this CDC lecture, "We Were There." Dr. David Fraser and Dr. Joseph McDade share their unique perspective commemorating the 40th anniversary of the discovery and diagnosis of Legionnaires' disease.

## REFLECT

### Then and now:

- Curious about Legionnaires' disease trends over time? [Learn the history](#).
- Read [press releases and MMWRs](#) about past Legionnaires' disease outbreaks.
- Art, society, and pneumonia converge in [this issue of Emerging Infectious Diseases](#).
- Outbreaks often influence public policy changers. [Read about policy changes spurred from CDC findings](#) .
- Read the story of Legionnaires' disease from the [History Channel](#) .
- Learn how [Legionnaires' disease](#) got its name.

## DO

### Give it a try:

- Looking for communication resources during a possible Legionnaires' disease outbreak? Find [fact sheets, sample letters, and more](#).
- Find guidance for [reopening buildings](#) after prolonged shutdown or reduced operation.
- Are you involved in water safety for buildings or curious to learn more? Check out [this training](#) from CDC and partners to reduce risk for Legionnaires' disease.

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